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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/743,224

12/22/2003

Tomohisa Sakurai

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11/09/2006

SCULLY SCOTT MURPHY & PRESSER, PC
400 GARDEN CITY PLAZA
SUITE 300
GARDEN CITY, NY 11530

EXAMINER

JOHNSON III, HENRY M

ART UNIT

PAPER NUMBER

3739

DATE MAILED: 11/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/743,224

Applicant(s)

SAKURAI, TOMOHISA

Examiner

Henry M. Johnson, III

Art Unit

3739

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-5,8,9,11-14,17,18,20-22 and 24-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-5,8,9,11-14,17,18,20-22 and 24-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>092106</u> . | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

Applicant's arguments filed August 31, 2006 have been fully considered and do negate the rejections based on inductive coupling in the connector. However, the limitation of non-mechanical contact for the energy transfer using light energy is taught by Pechstein et al. as cited in the rejections below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 4, 21-26, 28, 29 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,400,267 to Denen et al. in view of U.S. Patent 6,705,898 to Pechstein et al. Denen et al. teach the use of non-volatile memory to store utilization limits and parametric data for medical instruments (abstract). A control module (drive) is disclosed as connected to an electrically powered surgical scalpel; however, use with a vast array of electrically powered medial devices (probes) is disclosed (Col. 7, lines 35-41). The memory may be disposed in a connector (Fig. 2) thus implying a complementary mating connector. An actuator (switch) is disclosed (Fig. 3, # 37). The electrical contacts within the connectors are interpreted as the energy release and energy receiving units. Denen et al. teach the operational parameters are read from the memory, the request for the data and subsequent reading of the data comprising information exchange. Lack of a proper connection is inherent in that no data would be received. The device is disclosed to prevent electrically powered medical equipment from being used with incompatible power supplies, thus inherently requiring prohibition of

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operation until data transfer can confirm such compatibility (Col 3, lines 49-56). The control module may comprise a microprocessor to control the operating characteristics of a power supply module so that once equipment is connected to power supply and control apparatus, the control module may request a transfer of preprogrammed parametric data stored in the non-volatile memory. This data is then used by control module to regulate the power supplied by power supply module in accordance with the transferred parametric data. The parametric data may include, for example, voltage limits, current limits, instrument impedance, voltage setpoints, current setpoints, voltage ranges, current ranges and scale factors (Col. 9, lines 18-30). The step of reading the parametric data is interpreted as inherently including ceasing such reading when all the parameters are obtained. Denen et al. teach the updating (writing of data) into the memory of usage information for the specific medical device (Col. 2, lines 57-61). Denen et al. do not disclose a latching connector or energy transfer using non-mechanical means.

Pechstein et al. teach optical signal transmission between two portions of a connector. Optical signal transmission can take place at any frequencies (for example with UV, IR or visible light). To be able to accomplish bidirectional signal transmission, a first portion of the connector has a transmitting element of a first optical coupler and a receiving element of a second optical coupler. A second portion comprises a corresponding receiving element of the first optical coupler and the transmitting element of the second optical coupler. The connector includes a material which is optically transmissive at least for the frequency range which is relevant for signal transmission (Col. 6, lines 31-45). A means for holding the two portions together, be it a friction fit, snap fit or screwed elements are well known and obvious. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the latching connector and inductive coupling as taught by Pechstein et al. in the surgical device of

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Denen et al. to reduce the problems associated with dirty contacts and insure the integrity of the connection for the duration of a procedure.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,400,267 to Denen et al. in view of U.S. Patent 6,705,898 to Pechstein et al. as applied to claim 27 above, and further in view of U.S. Patent 5,401,175 to Guimond et al. Denen et al. and Tompkins et al. are discussed above, but do not teach magnets in connectors. Guimond et al. disclose the use of magnets in each of two sections of a connector to hold the sections together (abstract). It would have been obvious to one skilled in the art to use the magnets as taught by Guimond et al. in the invention of Denen et al. in view of Pechstein et al. as an alternative to a mechanical latching means to maintain the connection.

Claims 8, 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,400,267 to Denen et al. in view of U.S. Patent 6,705,898 to Pechstein et al. as applied to claim 27 above, and further in view of U.S. Patent 6,068,627 to Orszulak et al. Denen et al. and Tompkins et al. are discussed above, but do not disclose specific surgical devices. Orszulak et al. disclose an energy delivery device for use with surgical instruments including those using laser, microwave and ultrasonic energy that includes means in a connector for identifying the specific surgical instrument attached. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use any of the medical instruments as taught by Orszulak et al. in the invention of Denen et al. in view of Pechstein et al, as Denen et al. teach the use of such instruments without mentioning specific devices.

Claims 12-13, 17-20 and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,400,267 to Denen et al. in view of U.S. Patent 6,705,898 to Pechstein et al. as applied to claim 27 above, and further in view of U.S. Patent Application Publication US 2002/0111621 to Wallace et al. and U.S. Patent 6,068,627 to Orszulak et al.

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Denen et al., Tompkins et al. and Orszulak et al. are discussed above, but do not disclose the use of a remote surgical arm. Remote surgical arms are well known in the art for endoscopic procedures as well as tele-surgical procedures. Wallace et al. teach a robotically controlled articulated arm for a surgical tool. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the robotic arm as taught by Wallace et al. in the invention of Denen et al. in view of U.S. Patent 6,705,898 to Pechstein et al., as the use of remote arms is pervasive in the art and therefore obvious to incorporate. It is further obvious to use the specific medical instruments taught by Orszulak et al. for the varied instruments disclosed by Denen et al.

Claims 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,400,267 to Denen et al. in view of U.S. Patent 6,705,898 to Pechstein et al. in view of U.S. Patent Application Publication US 2002/0111621 to Wallace et al. and U.S. Patent 6,068,627 to Orszulak et al. as applied to claim 12 above, and further in view of U.S. Patent 5,401,175 to Guimond et al. All have been previously discussed. It would have been obvious to one skilled in the art to use the magnets as taught by Guimond et al. in the invention of Denen et al./Pechstein et al./Wallace et al./Orszulak et al. as an alternative to a mechanical latching means to maintain the connection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**


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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry M. Johnson, III whose telephone number is (571) 272-4768. The examiner can normally be reached on Monday through Friday from 6:00 AM to 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Henry M. Johnson, III
Primary Examiner
Art Unit 3739